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LAW OFFICES OF JONATHAN ALAN QUINE

By:

Juliana Hermes

Attorney Docket No: 02-020622US

Client Ref: 0104.005/



**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re application of:

Jeremy Minshull

Application No.: 09/490,643

Filed: January 24, 2000

For: METHODS AND COMPOSITIONS  
FOR CELLULAR AND METABOLIC  
ENGINEERING

Examiner: Whisenant, E

Art Unit: 1655

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**AMENDMENT**

Assistant Commissioner for Patents  
Washington, D.C. 20231

Dear Sir:

In response to the FINAL Office Action dated January 30, 2001, please reconsider the application in light of the Amendments and Remarks below. A Request for Continued Examination (RCE) and an appropriate petition to extend the date for response through the present date is submitted herewith.

**AMENDMENTS**

In the Claims:

Please amend the claims as follows, without prejudice to subsequent renewal.

CANCEL claims 105 and 149.

AMEND claims 93 and 143 as follows:

93 (Amended). The method of claim 31 or 33 wherein the at least one nucleic acid encodes one or more enzyme selected from the group consisting of: an acylase, a dioxygenase, a monooxygenase, a carotenoid synthetic enzyme, a hydrolytic enzyme, a catabolic enzyme, a nitroreductase, a benzene degrading enzyme, a nitrobenzene degrading enzyme, a nitrotoluene degrading enzyme, a toxin degrading enzyme, an industrial chemical degrading enzyme, an herbicide degrading enzyme, a cellulose degrading enzyme, a pesticide degrading enzyme, a